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From: Walter McLeod <mcleodw@api.org>
To: 'TSCA HAPS COMMENTS' <oppt.ncic@epamail.epa.gov>
Date: 6/22/98 4:28pm
Subject: electronic submission of TSCA HAPS comments

Please find attached the comments of the American Petroleum Institute (API) on EPA's Amended Proposed TSCA Section 4 Test Rule (63 FR 19694 April 21, 1998)

Regards,

Walter L. McLeod
API

<<HAPs Economic Analysis comments>> <<HAPs Policy comments>>
<<Hapscvr2>>



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***Comments on EPA's Economic Analysis
and Information Collection Request
for the Amended Proposed Test Rules
for Hazardous Air Pollutants***

Submitted by:

The American Petroleum Institute
1220 L Street, NW
Washington, DC

June 22, 1998

CONTAINS NO CBI

I. INTRODUCTION AND SUMMARY

The American Petroleum Institute (API) submits the following comments on the proposed Information Collection Request (ICR) amendment, entitled *Amended Proposed Test Rules for Hazardous Air Pollutants*. The U.S. Environmental Protection Agency (EPA)'s ICR proposes to require the manufacturers of 20 HAPs of Toxic Substance Control Act (TSCA) Section 4(a) Class 2 substances to use new criteria to determine if they are required to comply with the HAPs test rule. Since many API members manufacture streams which may contain HAPs components of a Class 2 substance, they have a direct interest in the change in testing and reporting obligation requirements for these facilities.

The Paperwork Reduction Act (PRA) requires EPA to adopt less burdensome approaches to collect or gather information from the public. EPA's approach in the amended rule is a cumbersome method to collect data that is not consistent with the PRA and tramples a two-decade old policy essential for the orderly implementation of TSCA.

This document also represents a response to the *Economic Assessment (EA) for the Amended proposed TSCA Section 4(a) Test Rule for 21 Hazardous Act Pollutants* prepared on November 14, 1997 for the EPA. The EA is deficient in a number of important areas. This document addresses some of these deficiencies and, where possible given data availability, provides a replacement for the analysis contained in the EA.

We believe that the Office of Management and Budget (OMB) should disapprove EPA's ICR since it is inconsistent with the PRA. Below, we detail the ICR's failure to comply with the statute and OMB's implementing regulations and guidance. These deficiencies include the following:

EPA has failed to comply with the basic procedural and analytic requirements of the PRA.

EPA's analysis is fundamentally flawed because it fails to consider the additional costs of expanding the scope of testing to cover "manufacturers" of impurities and "manufacturers" of components of Class 2 substances. EPA's analysis is in complete error when it states there will be no additional costs by expanding the scope of testing to cover impurities and components of Class 2 substances. EPA just assumes that the change would result in simply splitting the costs among an increased number of firms. EPA's approach raises serious question as to whether the information will have practical utility.

EPA omitted the costs to analyze Class 2 streams to determine testing obligation requirements and the costs to negotiate enforceable consent agreements to carry out the mandated testing. These additional costs are the following:

Costs to analyze streams to determine if impurities and components of Class 2 substances meet EPA's one percent threshold. These costs for the petroleum refining industry are estimated to

be between \$19 million and \$94 million.

Transaction and negotiation costs. Based on EPA's revised criteria, additional firms would be involved in splitting testing costs. Alliances that have already been formed for payment of the costs of testing may need to be renegotiated. Negotiating costs for the petroleum refining industry are estimated to be at least \$1 million.

These burdens are substantial. This analysis estimates that EPA omits between \$20 million and \$95 million in additional compliance costs due to EPA's proposed policy change.

EPA's policy change could signal a broad change in its manufacturing interpretation under TSCA. If so, the policy change could impact future Section 4(a) testing rules and reporting requirements under Section 8(b) and Section 12(b) of TSCA.

- **Future Section 4 Rules.** If EPA extended its policy change on impurities and components of Class 2 substances from this Section 4(a) testing rule to future Section 4(a) rules, the major difference would be that more facilities manufacturing Class 2 substances would be required to comply with the rule and thus to share the incremental costs of Section 4(a) testing. This policy change imposes two costs: negotiating costs and the cost of characterizing the components of Class 2 streams. The estimated annual burden and cost for future Section 4 rules of EPA's policy change is \$208 million.

- **Section 8(b) and 12(b).** Although this amended proposal limits its policy change to Section 4 of TSCA, EPA could apply the change to other sections of TSCA. If this policy change extended to Section 8(b), the economic burden to Class 2 manufacturers in SIC 2911 would be between \$50 million and \$340 million. Based on this data, increased 12(b) compliance costs would range between \$1.9 million and \$26.8 million (annualized over three years at 7 percent). It is likely that petroleum refineries will face compliance burdens at the high end of this range.

EPA should withdraw the ICR and correct these deficiencies in its analysis. Further, API stands ready to assist EPA in its efforts to comply with the PRA and to reduce the burdensome reporting requirements.

II. EPA'S REQUIREMENTS UNDER THE PAPERWORK REDUCTION ACT AND EXECUTIVE ORDER 12866

In the December 14, 1997 amended notice of proposed rulemaking, EPA proposed expanded coverage of TSCA Section 4 testing requirements for HAPs chemicals in any form, including impurities and components of Class 2 substances produced in volumes in excess of 25,000 lbs, and for HAPs components of Class 2 substances, an additional requirement that such component comprises one percent or more by weight of the Class 2 substance. This proposed collection of information is subject to the PRA approval process. In its proposal, EPA announced that the agency was seeking public comment on the burden estimate, the need for the information, and methods to minimize the burden of the collection.

In the House of Representatives Report accompanying the PRA, Congress summarized agencies' analytic requirements for reporting requirements contained in proposed rule. If agencies do not satisfy the statutory requirements, OMB is obligated to disapprove the proposed collection of information.

To obtain OMB approval of a collection of information, an agency shall demonstrate that it has taken every reasonable step to ensure that the proposed collection of information:

- (i) is the least burdensome necessary for the proper performance of the agency's functions to comply with legal requirements and achieve program objectives;
- (ii) is not duplicative of information otherwise accessible to the agency; and,
- (iii) has practical utility. The agency shall also seek to minimize the cost to itself of collecting, processing, and using the information, but shall not do so by means of shifting disproportionate costs or burdens onto the public.

These comments set forth API's opinion that EPA has failed to comply with the PRA's substantive standards and has grossly underestimated the burdens of its proposed information collection.

On January 11, 1996, the Office of Information and Regulatory Affairs published a guidance document entitled Economic Analysis of Federal Regulations Under Executive Order 12866 (the guidance). This document was intended to explain the purposes of the Economic Analysis required by Executive Order No. 12866 and guide the agencies in creating these documents. Economic Analysis (EA) is a new term of art that, for all intents and purposes, replaces the term Regulatory Impact Analysis.

According to the guidance, the purpose of an EA is to inform decision makers of the consequences of various alternatives considered in taking a regulatory action. The EA should

provide sufficient information to allow decision makers to determine that:

There is adequate information on the need for, and consequences of, the proposed action;

The potential benefits of the action justify the potential costs;

The proposed action will maximize net benefits to society;

The proposed action is the most cost-effective given statutory constraints; and,

Agency decisions are based on the best reasonably obtainable scientific, technical, economic, and other information.”

This information is necessary for the agency to demonstrate to its own decision makers, the Administrator of the Office of Information and Regulatory Affairs, other decision makers (e.g. the President), and the public, whether or not the proposed regulatory actions are consistent with the regulatory philosophy and principles established in Section 1 of Executive Order No. 12866 (the Executive Order).

III. OMB MUST DISAPPROVE EPA'S APPROACH UNDER THE PAPERWORK REDUCTION ACT

A. EPA Fails to Consider the Additional Costs of its Proposed Approach

OMB is required to disapprove EPA's ICR as drafted since it fails to fulfill EPA's statutory obligations under the PRA. Specifically, agencies must take every reasonable step to ensure that paperwork burdens are the least burdensome approach to collect the information, is not duplicative, and has practical utility.

As part of the agencies' requirements under the PRA an agency "shall demonstrate that it has taken every reasonable step to ensure that the proposed collection of information is the least burdensome necessary for the proper performance of the agency's functions to comply with the legal requirements and achieve program objectives." Therefore, if an agency proposes regulatory alternatives in a proposed rule, it must demonstrate that the agency's selected approach collects the necessary information in the least burdensome manner.

API's concerns with the practical utility and the accuracy of EPA's burden estimate are discussed below. However, as a matter of compliance with the PRA regulation, EPA has failed to justify its proposed approach as the least burdensome alternative to collect the necessary information.

1. EPA Underestimates the Burden of its Proposed Approach

a. Number of Additional Facilities Eligible to Pay for Health Effects Testing

In its proposal, EPA changes its long-standing TSCA policy and subjects “manufacturers” of impurities and components of Class 2 substances to the HAPs test rule if certain threshold criteria are met. While EPA proposes to increase complexity of the testing obligation determination, the Agency does not calculate the additional burden that facilities bear to determine their proposed new testing requirement under the proposed new rule.

EPA fails to acknowledge the distinction between the applicability criteria for TRI release reporting and the applicability criteria for TSCA Section 4 testing. For example, TRI reporting applies to waste streams, while TSCA Section 4 testing does not. Thus, by utilizing TRI release reporting criteria to determine the scope of TSCA Section 4 testing, EPA will significantly increase the number of manufacturers subject to TSCA Section 4 test rules. This is shown by the example below on ethylbenzene, one of the 21 HAPs.

In the EA, EPA measures economic impact by examining the listed companies that sell one of the 21 HAPs in commerce. The EA lists 10 manufacturers of ethylbenzene in the U.S. that would be responsible for the testing costs under long-standing TSCA Section 4 policy. Five of the ten are principally members of SIC code 2911 (i.e., petroleum refiners). However, in the 1995 Toxic Release Inventory (TRI), 159 members of SIC 2911 manufactured enough ethylbenzene to be required to report their ethylbenzene releases and waste management. Therefore, at least 149 more facilities would be eligible to pay for testing costs under EPA’s proposed policy.

In general, petroleum refineries do not know the exact composition of their Class 2 streams. To ascertain their chemical composition, and hence their respective testing obligations, facilities will have to analyze their streams. In this example, all 167 refineries would have to test all of their Class 2 streams to determine the 159 refineries that meet EPA proposed eligibility criteria for ethylbenzene.

Table 1 demonstrates the large gap between the number of manufacturers that sell these 20 HAPs and the manufacturers under EPA’s policy (as estimated by TRI reports). While only 16 facilities in SIC code 2911 sell these chemicals in commerce, U.S. petroleum refineries manufacture nearly 600 eligible chemicals at its facilities. Therefore, facilities will have to analyze their streams to know if they are eligible.

b. Analytical Costs of Determining the New One Percent Threshold

Attachment B details the methodology to estimate the costs of characterizing the components of Class 2 streams at a typical petroleum refinery. Since petroleum refining uses a diverse set of raw materials and produces a wide range of outputs, the analysis represents this diversity with a range of estimates. Based on these estimates, the 167 U.S. petroleum refineries face analysis costs of between \$18.8 million and \$93.9 million to determine whether they must share the costs of Section 4 testing costs of the 21 HAPs. EPA did not include the incremental costs in its economic analysis or the paperwork burden in the PRA analysis.

c. Negotiation Costs to Divide Testing Burden

In its economic analysis, EPA multiplies the laboratory costs to conduct the laboratory tests by 25 percent to account for the administrative and supervisory costs of running the data collection project. In effect, EPA's EA assumes that industry acts as a single project manager. EPA ignores the negotiation costs necessary for eligible firms to divide the testing costs among themselves.

TABLE 1.
Difference in Number of HAP Manufacturers

HAPs Covered By TSCA Rule	Estimated Number of API Manufacturers from November 14, 1997 Economic Analysis	Number of Facilities in SIC Code 2911 that Report HAP Chemical in 1995 TRI
1,1 Biphenyl	1	9
Carbonyl Sulfide	0	7
Chlorine	0	80
Chlorobenzene	0	1
Cresols (3 isomers)	0	29
Diethanolamine	2	56
Ethylbenzene	5	159
Ethylene Dichloride	0	0
Ethylene Glycol	3	26
Hydrochloric Acid	1	28
Hydrogen Fluoride	0	57
Maleic Anhydride	1	0
Methyl Isobutyl Ketone	1	7
Methyl Methacrylate	0	0
Naphthalene	1	106
Phthalic Anhydride	1	0
1,1,2 Trichloroethane	0	31
Vinylidene Chloride	0	0
Total	16	596

9

** Chloroprene and 1,2,4 Trichlorobenzene do not have data available in the TRI*

** as mentioned in the 12/24 proposed rule, the requirement for phenol has been removed from the amended HAPs proposal.*

It is well recognized that negotiating among parties to split cost is a process that imposes substantial negotiation and other transaction costs. By compelling firms to test substances, and subsequently negotiate the financing of these tests between firms, EPA is facilitating additional costs that are not accounted for in EPA's burden and cost estimates.

The best evidence to support the existence of substantial negotiation costs in this rulemaking is the delay in promulgating the final rule as EPA has waited for industry to craft Enforceable Consent Agreements (ECA). EPA has waited nearly two years since the promulgation of the original proposal. As required by EPA regulations, firms have spent that time negotiating a division of the testing costs and crafting these agreements:

Under its regulations, EPA is required to provide the public with an opportunity to comment on and participate in the development of ECAs. (The procedure for ECA negotiations are described at 40 CFR 790.22(b).) Under the ECA process, EPA will publish a notice in the Federal Register soliciting interested parties to participate in or monitor negotiations for ECAs on those HAPs chemicals for which the Agency has decided to proceed. The notice will also announce a date for one or more public meetings to negotiate the PK (pharmacokinetics) ECAs, EPA may raise issues, based on the Agency's further review of the PK proposals, that differ from those contained in the Agency's preliminary technical analysis.

Therefore, by EPA regulation, parties to an ECA must solicit public comment and respond to these comments. EPA did not include any of the burden of these obligations in its EA or paperwork burden calculation.

To estimate the negotiating costs in this analysis, API assumes that, in each eligible firm, a technical person devotes two hours a month per chemical to negotiate a division of costs. This time is spent in meetings, gathering data, and developing cost-splitting methodologies that are favorable to that firm. The average length of negotiation is one year. A final agreement is reviewed for 20 hours by legal and managerial staff. The number of eligible firms is assumed to be the total number of companies manufacturing the HAP based both on sales data and the TRI reports. (See Table 1 and Attachment B for further details.) Using this approach, the burden of the rule increases by 16,664 hours and the cost by over \$1 million.

These negotiation costs do not add any value to society and, in fact, consume productive resources that could otherwise produce items of value. Since these negotiating costs are directly proportional to the number of firms eligible to pay, EPA has substantially increased the burden by its policy change for Class 2 substances.

2. EPA Failed to Choose Least Burdensome Approach

Once the testing obligation requirements and negotiating costs are included, it is clear that EPA did not choose the least burdensome approach to collect data on the HAPs that are not sold in commerce. EPA failed to consider two less burdensome options:

Public Financing. For any chemical that is not sold in commerce, EPA or other Federal agencies could pay to carry out the TSCA testing guidelines for the single chemical without a commercial manufacturer, carbonyl sulfide. This approach would resemble the approach estimated in the EA since a single, unitary organization administers the testing protocol. EPA already finances extensive research on chemical test methods and on potential chemical-specific effects. In recent years, EPA has financed chemical-specific studies on mercury and chemicals deemed potential endocrine disruptors. EPA could undertake a similar effort in this instance.

Tiered Scheme Approach to the Class 2 Manufacturers. As an alternative to implementing the test rule as described in the amended proposed test rule, API recommends a tiered scheme for applying the requirements. In the tiered scheme, manufacturers of components of Class 2 substances would not be required to test unless directed to do so in a subsequent notice. EPA would issue the subsequent notice only if there are no manufacturers of the listed HAP as a Class I substance. The cost of this alternative would be substantially lower than EPA's proposed approach. Manufacturers of Class 2 substances would face lower testing and negotiating costs since they would be subject to a fewer number of chemicals.

B. EPA's Proposal Lacks Practical Utility

In defining practical utility, Congress admonished agencies not to circumvent its direction to minimize government costs by shifting burdens to private parties. Specifically,

The agency shall also seek to minimize the cost to itself of collecting, processing, and using the information, but shall not do so by means of shifting disproportionate costs or burdens onto the public.

However, EPA proposes to do exactly that. As discussed above, EPA could simply pay for the tests itself for those HAPs not sold in commerce. However, rather than minimizing costs, EPA simply rejected 20 years of sound policy for Class 2 substances.

An example illustrates how these options would be less costly than EPA's proposed approach. EPA would require firms to analyze all their Class 2 streams for the presence of HAPs chemicals, and then negotiate among themselves to divide pharmacokinetics data acquisition costs. These extra analyses and negotiating costs due to the policy change are between nearly \$20 million and \$95 million. EPA ignores the less burdensome, tiered approach, which would require the analysis of Class 2 substances for the presence of HAPs, only if no manufacturers of the HAPs chemical as an isolated product for commercial sale were identified.

IV. EPA FAILS TO CONSIDER BURDENS IF POLICY APPLIED TO OTHER PARTS OF TSCA

A. Estimated Burden if Applied to Other Section 4 Testing Rules

If EPA extended its policy change on Class 2 substances from this Section 4(a) testing rule to future Section 4(a) rules, the major difference would be that more facilities managing Class 2 substances would be manufacturers eligible to share the incremental costs of Section 4(a) testing. As discussed in the previous section, this policy change imposes two costs: negotiating costs and the cost of characterizing the components of Class 2 streams.

As it is uncertain which chemicals will be the target of future Section 4 testing rules. The analysis examines the ratio of commercial manufacturers to reported manufacturers under the TRI to estimate the average increase in the number of manufacturers for a representative set of chemicals. The analysis then constructs a ratio of the manufacturers as calculated by TRI to the actual manufacturers as demonstrated by chemical marketing data. This ratio is then used to predict the additional manufacturers that would exist in the future if EPA's policy change is applied to future Section 4 rules. (See Attachment C for more details.)

With an estimate of the number of additional manufacturers from this step, the analysis estimates the incremental testing and negotiating costs using the same methodology described in the previous section. The result of this step is the total incremental cost and burden of the policy change for each new chemical subject to a Section 4 rule in the future.

To create an estimate of the incremental annual cost and burden, it is necessary to make an assumption of how many new Section 4 rules EPA will promulgate each year. The analysis takes the average annual number of chemicals subject to Section 4 rules during the period 1992 to 1997 and projects this average annual rate into the future. Combining the annual rate of rules, the increased number of eligible facilities, and the cost per facility yields the estimated effect. The estimated annual burden and cost for future Section 4 rules of EPA's policy change is \$208 million.

B. estimated Burden if Applied to Section 8 requirements

1. TSCA Section 8(b) Reporting Requirements

Although this amended proposal limits its policy change to Section 4 of TSCA, EPA could expand the policy in other sections of TSCA. The majority of the paperwork and compliance burden in TSCA regulation are in Section 8(b) and Section 12(b). Therefore, this analysis examines EPA's information collection requests under the Paperwork Reduction Act to estimate the proposal's potential economic cost and increased paperwork burden for Section 8(b) and Section 12(b) reporting requirements.

The following table outlines the current reporting requirements and regulations under TSCA sections 8(b) and 12(b), as well as the prospective changes that may occur as a result of the

amended HAP Testing Rule.

TABLE 2.
Policy Change Applied to TSCA Section 8(b) and 12(b)

TSCA Section	Current Reporting Requirements	Potential Change Under New Policy
8(b) Inventory Update Rules	Compels all persons who manufacture, process or import commercial chemicals in the US to report to EPA the following: (1) company name and site address, (2) Dun and Bradstreet number for company, (3) each chemical identity, (4) each chemical activity, either manufacturing or importing, and (5) production volume for the reporting year for each specified chemical on the inventory of chemical substances in commerce.	Companies that produce Class 2 substances will have to analyze their Class 2 streams and calculate the production volume of predominately incidental byproducts and impurities.
12(b) Export Notification Rules	Requires any firm that intends to export a chemical that is regulated under TSCA section 4,5,6 and/or 7 to submit notification of such a proposed export to EPA.	A policy change under section 12(b) would reinterpret manufacturing to include all components of a Class 2 substance. Facilities would have to file more export notices with EPA to comply.

2. Estimated Paperwork Burdens if Policy Applied to Section 8(b)

To estimate the increased financial and paperwork burden of this potential policy change, the EOP Group examined EPA's burden and cost estimates for TSCA Section 8(b) reporting under the Paperwork Reduction Act.

Attachment A lists the TSCA sections for which EPA has an authorized or pending ICR to collect data from the public. In these ICRs, EPA estimates the burden of compliance. However, as seen on Table 2, the policy change would increase paperwork burdens. Attachment A contains the detailed calculations of this increased burden. Table 4 below summarizes the additional burden and cost for petroleum refineries under Section 8(b).

The Chemical Inventory Update is substantially more burdensome than the other TSCA Section 8 requirements. The economic burden to Class 2 manufacturers in SIC 2911 of between \$50 million and \$340 million is two to ten times greater than the estimated cost of the HAP testing rule.

3. Estimated Paperwork Burdens if Policy Applied to Section 12(b)

In its ICR estimating the burdens under TSCA section 12(b), EPA predicts that respondents must engage in two activities to comply: (1) compile a list of chemical subject to export notification; and (2) file the notification with EPA for the first shipment of each regulated chemical to a country.

If EPA applied this policy change for Class 2 substance to section 12(b) requirements, firms would have to train their staff to comply with the requirements for the expanded list of chemicals. Firms then would have to engage in the activities EPA describes. The burden to compile an expanded list is based on estimates provided in public comments by a chemical manufacturing firm, this firm operates complex integrated manufacturing sites comparable to a petroleum refinery. (See Attachment A for more details.)

To estimate the number of new export notifications firms would have to file if components of Class 2 petroleum streams were subject to 12(b) provisions, the analysis assumes that all refineries export some products affected by the policy change. However, not all chemicals manufactured would be exported, just as not all chemicals eligible under 12(b) today are exported. To estimate the percentage of the new chemicals subject to 12(b) requirements due to the policy change that actually would be exported, the analysis uses EPA's percentages. For example, from 1993 to 1996 EPA assumed that the average U.S. facility that filed 12(b) notifications filed 41 notices for the 742 eligible chemicals, or 0.055 notices per facility per eligible chemical. In its 1996 ICR, EPA decreased the ratio to 0.034 notices per facility per eligible chemical. The analysis applies both values to provide an estimated range.

The important parameters to calculate the paperwork burden if EPA's changed policy apply to Section 12(b) are listed in Table 3. Additional assumptions are listed in Attachment A.

TABLE 3.
Assumptions for 12(b) Burden Analysis

Number of Refineries	167
Number of New Chemicals Manufactured per Refinery	61-500
Notices per facility per eligible new chemical	0.034-0.055
Burden hours per Notice	1 hour technical staff 1/2 hour clerical staff

Based on this data, compliance costs will range between \$1.9 million and \$26.8 million (annualized over three years at 7 percent). It is likely that petroleum refineries will face compliance burdens at the high end of this range. Petroleum refineries are likely to export more chemicals than the average firm that must comply with 12(b) requirements.

TABLE 4.
Increased Burden to Petroleum Refineries if Policy Applies to Other TSCA Sections

TSCA Section	Principal Burden Activity	Added Burden Hours Every Three Years (thousands)	Added Costs (million \$, annualized every 3 years at 7 percent)
8 (b)	Analyzing	595 - 4,500	50 to 340
12(b)	Notifications	11.5-30.6	1.9-26.8

ATTACHMENT A

Table A-1 quantifies the effect of the policy changes listed in Table 2. The table presents the burdens for additional actions facilities would have to take to comply with the rule, the estimated burden to comply with these requirements, and the rationale for the estimates.

TABLE A-1
Burden Assumptions for TSCA Section 8 and Section 12(b)

TSCA Section	Effect of Potential Policy Change	Specific Cost Assumptions	Rationale
8(b)	<p><i>Increased Worker Training to Comply with Change.</i> Company will have to train managers at each facility to calculate inventory based on the expanded scope of the test rule.</p>	<p><i>Initial Training Burden requires:</i> 10 hours of corporate legal staff time per company 2 hours managerial staff time per site (refinery) 4 hours of technical staff time per site 3 hour of clerical staff time per site</p> <p><i>Future Training:</i> Turn-over/refresher training requires ½ of the initial burden every two years.</p>	<p>TSCA managers at each site must be informed of change in policy</p> <p>Turnover in staff requires that new people in these positions to be trained</p>

	<p><i>Increased Number of Substances Reported in Inventory Updates</i></p>	<p>Each refinery faces the following three costs per each four-year cycle of reporting:</p> <p>Identify Reportable Components of Class 2 Substances Each facility would have to analyze each stream to identify all components that constitute at least one percent by weight of any stream. This effort would require testing input streams, intermediate streams, and product streams.</p> <p>Calculate Quantity of Each Reportable Component Produced Use subsequent-year Form R completion cost estimates under TRI for each chemical reported</p> <p>Reporting and Recordkeeping Costs Use first-year recordkeeping/mailling costs for Form R reporting under TRI for each chemical reported.</p>	<p>Since the number of substances that will actually be above the reportable level of one percent is unknown, conduct three alternative estimates: 1) Use API study on composition of major products and crude oil as the best estimate for the analysis. 2) TRI reported chemicals and API composition data 3) Assumed number of 500 constituents per refinery. (See Attachment B.)</p> <p>EPA calculated the subsequent year compliance with Form R by assuming the major respondent activity is recalculating the quantities reported.</p> <p>TRI Form R is a comparable set of information</p>
12(b)	<p><i>Increased Worker Training to Comply with Change.</i> Corporate TSCA officials will have to adopt and communicate policy change.</p>	<p><i>Initial Training Burden requires:</i> 10 hours of corporate legal staff time per company 3 hours managerial staff time per site (refinery) 4 hours of technical staff time per site 3 hour of clerical staff time per site</p> <p><i>Future Training:</i> Turn-over/refresher training requires ½ of the initial burden every two years.</p>	<p>TSCA managers at each site must be informed of change in policy</p> <p>Turnover in staff requires new people in these positions to be trained</p>

<p>Compile Lists. Addition of new Section 4 chemicals will require firms to update export lists.</p>	<p>Firms will update computer databases to include each new regulated chemical.</p> <p>4 hours legal staff per company 8 hours managerial staffer per company 20 hours technical staff per company</p>	<p>Based on estimates provided by the Dow Chemical Company in its comments to the most recent 12(b) ICR.</p>
<p>Increased Number of Export Notifications. The firms will have to send more export notices the more they ship components of a Class 2 substance.</p>	<p>File Export Notifications for Components of Class 2 Substances.</p> <p>Assume 1 hour of technical labor and ½ hour of clerical per notice.</p>	<p>Since the number of substances that will actually be above the reportable level of one percent is unknown, conduct three alternative estimates:</p> <p>1) Use API study on composition of major products and crude oil as the best estimate for the analysis.</p> <p>2) TRI reported chemicals and API composition data</p> <p>3) Assumed number of 500 constituents per refinery. (See Attachment B.)</p> <p>Assume Percentage of New Reportable Chemicals exported per facility per year is same as average of EPA's experience in last six years.</p> <p>Burden estimate per notice based on public comments from Dow Chemical Company.</p>

ATTACHMENT B

Testing Costs and Frequency

Number of Companies, Refineries, and Employees

Based on the 1995 TRI data, there are 118 separate corporations that filed TRI reports under the primary SIC code of 2911, petroleum refining. To calculate the number of sites reporting, the analysis uses EPA's estimate of 167 refinery sites in the United States. The number of employees at all petroleum refineries in the United States, according to the Bureau of Census in 1992, was 75,000 people.

Number of Streams at a Typical Petroleum Refinery

Refineries do not process a single type of crude oil. While some refineries may process as few as 10 different types of crude oil during a year, many process up to 50 or 60 annually. The mixture of hydrocarbons in each type of crude oil differs. Moreover, two different shipments of the same crude oil are likely to have slightly different composition, depending on the particular wells or reservoirs from which the crude was derived. Generally, refineries have no economic reason to characterize these differences between shipments and will treat all crude oil of a particular type as having the same properties.

From these inputs, refineries produce numerous different products. The *Petroleum Supply Annual* from the Energy Information Administration lists 17 general categories of refined products. But this Annual includes only one category for motor gasoline, for example. Most refineries produce several grades of motor gasoline, and with the addition of reformulated gasoline, this number has expanded so that some refineries produce as many as nine grades of gasoline. One refiner reports producing a total of 300 different petroleum products annually. Some of these, including specialty lubricants, greases, and heavy oils, may be produced in small quantities, but the chemical components of each would have to be tested to characterize these components for determining Section 4 testing obligations.

If a facility refines 2 types of crude oil during a year into 40 intermediate streams and 40 products, the refinery would have to analyze 160 different Class 2 streams in that year to determine whether the component chemicals are above the reporting threshold criterion of one percent. To represent the range of streams, the analysis assumes that refineries would have to conduct between approximately 150 and 750 analyses to characterize their streams in any given year.

Number of Chemicals "Manufactured" Under EPA's New Policy

API believes that numerous individual chemicals are in Class 2 substances. EPA's policy would extend TSCA Section 4's reach to intermediate streams, final products, and waste streams. To estimate the full impact of the proposed change, the analysis must have data on the chemical composition of Class 2 refinery intermediates, derived-from final products, and waste streams.

The analysis must make several assumptions to estimate the number of substances per refinery that meet EPA's proposed manufacturing criteria. The analysis creates low, medium, and high estimates drawing from several sources:

Low Estimate. API has collected limited data on the composition of several grades of crude oil, gasoline, jet fuel, and heating oil. This data is not a complete chemical analysis and only contains data for a limited number of crude oils and refined products. For example, it does not contain any data on the composition of special naphtha, aviation gasoline, or liquid petroleum gas (LPG). Table B-1 lists the 61 unique constituents found above the level of one percent in any product from this report.

An estimate of 61 chemicals per refinery is likely to underestimate the actual number for three major reasons: (1) the data only includes crude oil and products, not intermediate refinery streams or waste streams; (2) even considering just products, data is not available for all products; and (3) the estimate implicitly assumes the refinery does not shift its raw material or product composition.

Medium Estimate. The medium estimate adds TRI data for SIC code 2911 to estimate the number of chemicals manufactured in TRI-reported material streams. EPA's proposed Class 2 thresholds are very similar to the EPCRA Section 313 reporting thresholds. Therefore, the number of chemicals reported in TRI reflect the number manufactured in waste streams above EPA's proposed threshold for TSCA Section 4. Table B-1 lists all unique TRI chemicals reported from SIC code 2911 facilities. There are nine chemicals common to API's constituent data and the TRI data, giving an estimate of separate chemicals per refinery.

An estimate of 114 chemicals per refinery contains some uncertainty: (1) the data only includes crude oil, products, and TRI waste stream data, not intermediate refinery streams; (2) even considered just product, data is not available for all products; (3) the estimate implicitly assumes the refinery does not shift its raw material or product composition; (4) each refinery may not have every reported chemical at a one percent concentration; and, (5) some TRI chemicals may not be byproducts or impurities, but solvents or chemical otherwise used in the production process.

High Estimate. As discussed above, a typical refinery can use different raw materials and create thousands of intermediate streams and products in a year. If a facility refines 2 types of crude oil into 40 intermediate streams and 200 products, the refinery could theoretically manufacture a maximum of 24,200 ($2 \times 100 + 40 \times 100 + 200 \times 100$) different chemicals above the reporting threshold criterion of one percent composition. In practice, many chemicals will overlap and not all streams will be comprised of 100 chemicals each exactly at one percent concentration. However, theoretical maximum illustrates how large the number of manufactured chemicals could be. To simulate the possibility that, the analysis assumes 500 chemicals in the high estimate scenario.

Analysis Costs. Petroleum refineries do not currently analyze their streams to identify each chemical that is present above a one percent level. Therefore, facilities would have to analyze

each stream to identify its constituents. Analysis is assumed to occur with a gas chromatography test at a cost of \$750 per analysis. Taking the sample, transporting the sample, and analyzing the data is expected to consume two hours of a technician's time. Recording the results will require one hour of clerical time.

Table B-1.	
1995 TRI Reported Chemicals for SIC 2911 Chemicals	Identified Chemicals Above One Percent in Certain Petroleum Products
1,1,1-TRICHLOROETHANE	1,2,3,4-tetramethylbenzene
1,2,3-TRICHLOROPROPANE	1,2,3-trimethylbenzene
1,2,4-TRIMETHYLBENZENE	1,2,4-triethylbenzene
1,2-DIBROMOETHANE	1,2,4-trimethylbenzene
1,2-DICHLOROETHANE	1,3,5-trimethylcyclohexane
1,2-DICHLOROPROPANE	1-ethylpropylbenzene
1,3-BUTADIENE	1-methyl-2-ethylbenzene
1,3-PHENYLENEDIAMINE	1-methyl-3-ethylbenzene
2,3-DICHLOROPROPENE	1-methyl-4-ethylbenzene
2,4-DIMETHYLPHENOL	1-methylnaphthalene
2-ETHOXYETHANOL	2,2,4-trimethylpentane
2-METHOXYETHANOL	2,3-dimethylbutane
4,4'-ISOPROPYLIDENEDIPHENOL	2,3-dimethylbutane
ACETALDEHYDE	2,6-dimethylundecane
ACETONITRILE	2-methyl-2-butene
ACETOPHENONE	2-methylheptane
ALLYL ALCOHOL	2-methylhexane
ALLYL CHLORIDE	2-methylnaphthalene
AMMONIA	2-methylpentane
ANTHRACENE	2-methylpentane
ANTIMONY COMPOUNDS	2-methylundecane
ARSENIC COMPOUNDS	3,3-dimethylhexane
ASBESTOS (FRIABLE)	3,4-ethyltoluene
BARIUM COMPOUNDS	3-methylheptane
BENZENE	3-methylhexane
BERYLLIUM COMPOUNDS	3-methylpentane
BIPHENYL	4-methylheptane
BUTYRALDEHYDE	Benzene
CADMIUM	Butane
CARBON DISULFIDE	Cyclohexane
CARBON TETRACHLORIDE	Decane
CARBONYL SULFIDE	Dimethylhexanes
CERTAIN GLYCOL ETHERS	Dodecane
CHLORINE	Ethylbenzene
CHLORINE DIOXIDE	Heptane
1995 TRI Reported Chemicals for SIC 2911 Chemicals	Identified Chemicals Above One Percent in Certain Petroleum Products
CHLOROBENZENE	Heptylcyclohexane
CHLORODIFLUOROMETHANE	Hexadecane
CHLOROFORM	Hexane
CHLOROTRIFLUOROMETHANE	Hexylcyclohexane
CHROMIUM	Isobutane
COBALT COMPOUNDS	Isopentane
COPPER COMPOUNDS	m-xylene
CRESOL (MIXED ISOMERS)	Methylcyclohexane
CUMENE	Methylcyclopentane

CUMENE HYDROPEROXIDE	Methylcyclopentane
CYANIDE COMPOUNDS	Methylhexanes
CYCLOHEXANE	Methylpentanes
DICHLORODIFLUOROMETHANE	Methylpentenes
DICHLOROMETHANE	n-butylcyclohexane
DICYCLOPENTADIENE	n-hexane
DIETHANOLAMINE	Naphthalene
DIISOCYANATES	Nonane
EPICHLOROHYDRIN	o-xylene
ETHYL ACRYLATE	Octane
ETHYLBENZENE	p-xylene
ETHYLENE	Pentadecane
ETHYLENE GLYCOL	Pentane
ETHYLENE OXIDE	Pentenenes
ETHYLIDENE DICHLORIDE	Toluene
FLUORINE	Tridecane
FORMALDEHYDE	Undecane
HYDRAZINE	
HYDROCHLORIC ACID	
HYDROGEN CYANIDE	
HYDROGEN FLUORIDE	
ISOBUTYRALDEHYDE	
LEAD	
M-CRESOL	
M-XYLENE	

Table B-1.	
1995 TRI Reported Chemicals for SIC 2911 Chemicals	Identified Chemicals Above One Percent in Certain Petroleum Products
MANGANESE	
MERCURY COMPOUNDS	
METHANOL	
METHYL ETHYL KETONE	
METHYL ISOBUTYL KETONE	
METHYL TERT-BUTYL ETHER	
MOLYBDENUM TRIOXIDE	
N-BUTYL ALCOHOL	
N-HEXANE	
N-METHYL-2-PYRROLIDONE	
NAPHTHALENE	
NICKEL	
NITRATE COMPOUNDS	
NITRIC ACID	
O-CRESOL	
O-XYLENE	
P-CRESOL	
P-XYLENE	
PERACETIC ACID	
PHENANTHRENE	
PHENOL	
PHOSPHORIC ACID	
POLYCHLORINATED BIPHENYLS	
POLYCYCLIC AROMATIC COMPOUNDS	
PROPYLENE	
PROPYLENE OXIDE	
PYRIDINE	
QUINOLINE	
SEC-BUTYL ALCOHOL	
SELENIUM COMPOUNDS	
SILVER	
SODIUM NITRITE	
STYRENE	
SULFURIC ACID	
1995 TRI Reported Chemicals for SIC 2911 Chemicals	Identified Chemicals Above One Percent in Certain Petroleum Products
TERT-BUTYL ALCOHOL	
TETRACHLOROETHYLENE	
TOLUENE	
TRICHLOROETHYLENE	
TRICHLOROFLUOROMETHANE	
VANADIUM (FUME OR DUST)	
VINYL ACETATE	
XYLENE (MIXED ISOMERS)	
ZINC COMPOUNDS	

ATTACHMENT C

Future Section 4 Testing Rule Burdens and Costs

Methodology

Select a Sample of Chemicals

The analysis selected a sample of the hazardous air pollutants (HAPs) listed by EPA regulation under the Clean Air Act. A HAP is selected for the sample if (1) there is readily available chemical production data by facility; and (2) it is listed on the TRI inventory.

Production capacity data is taken from Chemical Marketing Service reports. While the EPA threshold criterion is based on sales, not production capacity, the analysis assumes that over the long term, production capacity is closely related to actual sales. Moreover, EPA used production capacity data in the EA to simulate actual sales data.

TRI data is used to determine if the facility manufactures a chemical in the same manner that EPA proposes for Class 2 substance manufacturers - any component of a mixture with a concentration greater than one percent and with an annual average production amount of 25,000 pounds.

Construct Ratios

Table C-1 lists the 36 HAPs that meet both criteria. The second and third column list the number of manufacturers in SIC code 2911 and all manufacturing industries, respectively, that are listed as having some capacity to produce the chemical for sale in commerce. The fourth column is the number of facilities that reported releases or waste management of the chemical on the TRI list. The final two columns are the ratios of the number of reporting facilities on the TRI to the number of all or SIC code 2911 production facilities.

For example, five facilities in SIC code 2911 manufacture cumene for commercial sale. Ten facilities in all manufacturing sectors report production capacity to make and to sell cumene. From the 1995 TRI data, however, many more facilities (i.e., 273) report releases or waste management of cumene. If future TSCA testing rules applied to cumene, five petroleum refineries and 10 facilities in total would likely to be eligible to share the costs. However, under EPA's proposed revised manufacturing criteria for Class 2 substances, 273 facilities could be manufacturers eligible to share the costs. In other words, EPA's policy would increase the total number of eligible manufacturers by 27.3 times (i.e., 273/10).

TABLE C-1.
Sample of Actual Manufacturers versus EPA's Manufacturing Definition

Eligible HAPs	Manufacturers		TRI Data	Ratios	
	SIC Code 2911	All SIC Codes	Total Facilities	2911 to TRI	All Manf. to TRI
	5	10	273	54.6	25.8
	8	10	191	23.9	19.1
	10	18	465	46.5	27.3
	4	18	2412	603	134
	4	5	65	16.3	13
	4	8	37	9.3	4.6
	3	9	1496	498.7	166.2
	2	13	157	78.5	12.1
	2	5	124	62	24.8
	1	3	2255	2255	751.7
	1	2	229	229	114.5
	1	5	155	155	31
	0	4	963	0	240.8
	0	15	790	0	52.7
	0	2	771	0	385.5
	0	12	740	0	61.7
	0	6	291	0	48.5
	0	4	187	0	46.8
	0	4	159	0	39.8

	0	6	105	0	17.5
	0	3	90	0	30
	0	4	80	0	20
	0	2	69	0	34.5
	0	2	68	0	34
	0	3	67	0	22.3
	0	6	66	0	11
	0	2	63	0	31.5
	0	2	55	0	27.5
	0	2	52	0	26
	0	12	48	0	4
	0	1	45	0	45
	0	1	36	0	36
	0	3	30	0	10
	0	14	28	0	2
	0	4	16	0	4
	0	4	3	0	0.8
Average Ratio Across Chemicals				112	71

This example does not suggest that benzene would or should be subject to future Section 4 testing rules. Rather, it is meant to illustrate that many more facilities manufacture substances than the number of facilities that sell refined substances.

The average ratio of actual manufacturers to TRI manufacturers for these 36 HAPs is 71. For every actual manufacturer of a HAP, 71 other facilities do not make it or sell it, but "manufacture" it under EPA's definition. These facilities will bear extra costs of compliance and must be included in the burden estimate.

Costs for Additional Manufacturers

Facilities bear testing costs and negotiating costs. The methodology to calculate testing costs is given in Attachment B. The analysis assumes that the other 71 facilities are less complex than a typical petroleum refinery. Therefore the analysis assumes that these facilities have the lower bound estimate of internal streams - 150 internal streams subject to analysis. Analysis costs for each of the 71 incremental facilities is \$112,500. The incremental cost per each additional chemical subject to a Section 4(a) testing rule is \$8.0 million.

Negotiating costs are given Section IV of the text. Assuming each negotiated enforceable consent agreement requires one year to complete, the average negotiating cost per additional chemical subject to Section 4(a) rule is \$225,000.

Estimated Annual Number of Chemicals Subject to Future Section 4 Testing Rules

Since the number of chemicals subject to Section 4 test rules is uncertain, the analysis determines the annual average of chemicals added to Section 4 requirements over the six year period 1992-1997. Table C-2 lists the number of chemicals added annually over this period. The analysis projects this annual average into the future to estimate the incremental annual average cost and burden of the policy change of future Section 4 rules.

TABLE C-2.
Annual Average Number of Section 4(a) Substances

Year	Number of Section 4(a) Substances
	1
	72
	78
	0
	0
	0
1992-1997 Average	25.2

If EPA adds on average 25.2 chemicals each year to the Section 4(a) list and the incremental negotiation and testing costs per new chemical are \$8.25 million due to the policy change, the incremental annual cost would be \$208 million.

Comments of the American Petroleum Institute

Amended Proposed Test Rule for Hazardous Air Pollutants

Comments on Amended Proposed Rules:

62 FR 67465, December 24, 1997

63 FR 19694, April 21, 1998

OPPTS-42187A; FRL-4869-1

Submitted By:

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Comments of the American Petroleum Institute

Amended Proposed Test Rule for Hazardous Air Pollutants

62 FR 67465, December 24, 1997

63 FR 19694, April 21, 1998

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Comments of the American Petroleum Institute

Amended Proposed Test Rule for Hazardous Air Pollutants

62 FR 67465, December 24, 1997

63 FR 19694, April 21, 1998

I. Introduction and Summary

The American Petroleum Institute (API) submits these comments to the United States Environmental Protection Agency (EPA) on the amended proposed Toxic Substances Control Act (TSCA) section 4 test rule for hazardous air pollutants (HAPs) at 62 FR 67465, December 24, 1997 and the amended proposed test rule at 63 FR 19694, April 21, 1998. API is a national trade association representing more than 300 member companies involved in all aspects of the oil and gas industry, including exploration, production, refining, transportation, distribution, and marketing of petroleum and petroleum products. On April 4, 1997, API submitted comments on the June 26, 1996 proposed test rule for HAPs (61 FR 33178).

The amended proposal would introduce new policy for implementing TSCA that would have far-reaching implications for both our members and for others in the regulated community. These comments address the new issues presented by the amended proposal, and supplement our April 4, 1997 comments, which we incorporate by reference.

Most of our comments on the amended proposal relate to the "Persons Required to Test" portion of the December 24, 1997 *Federal Register* notice (section C, pages 67469-67472). Our comments include the following main points:

- The amended proposal would significantly expand the scope of the proposed rule by subjecting to the testing requirements persons who are "manufacturers" of HAPs as impurities or as components of Class 2 substances. EPA has not justified this proposed expansion, and it is incumbent upon the Agency to do so.
- EPA's proposal to require "manufacturers of components of Class 2 substances" to test contradicts long-standing TSCA policy and implementation. Consistent with past TSCA interpretations and practice, manufacturers of components of Class 2 substances should be required to test only if they produce and isolate the components from the Class 2 substances of which they are a part. EPA should not apply the proposed new policy in this rule or in any other TSCA rules, such as other test rules, section 5 requirements, or Inventory Update reporting. To apply the proposed policy would undermine years of TSCA precedent and impose significant burdens without any benefits.
- As an alternative to EPA's amended proposal, API offers a tiered scheme in which manufacturers (including importers) of a listed substance as a component of a Class 2 substance are not required to test, unless there are no manufacturers of a listed substance as a Class 1 substance. If no manufacturers of a Class 1 substance submit a notice of intent to conduct testing, then EPA could issue a subsequent notice directing others to test. Such a tiered scheme would be more consistent with the existing regulatory framework and nomenclature for regulation of Class 2 substances, would focus testing requirements on the primary manufacturers of the HAPs as distinct chemical substances produced for

direct commercial benefit; would facilitate the rulemaking and testing process; would reduce unnecessary burdens; and would be equally protective of health and the environment as EPA's current proposal.

- Our comments address other key issues including: (1) EPA should not require export notifications for Class 2 substances that contain HAPs; (2) EPA should clarify that the test rule will not require companies to analyze mixtures and Class 2 substances for the presence of HAPs constituents; and (3) waste streams captured and substantially destroyed should not be considered in determining applicability of the test rule.

The remainder of this document explains and discusses these and other points.

II. The Amended Proposal Expands Applicability of the Rule and Contradicts Long-Standing Policy, Without Adequate Justification

A. The amended proposal significantly expands applicability of the rule, by applying testing requirements to "manufacturers" of impurities and of components of Class 2 substances

The amended proposal would significantly change the applicability of the proposed test rule and would depart from two decades of policy and practice for implementing TSCA. In the amended proposal, EPA proposes to include among persons required to test those who manufacture subject chemicals "as a component of a mixture, as a byproduct, as an impurity, as a component of a Class 2 substance, or as an isolated intermediate." (62 FR 67470) This diverges from EPA's previous policy and significantly expands the scope of the HAPs testing proposal in at least two ways.

First, the June 26, 1996 proposal did not require testing by persons who manufacture or process a subject substance only as an impurity (proposed 40 CFR 799.5053(a)(2)); the amended proposal does. Second, the amended proposal would apply to manufacturers of a HAP "as a component of a Class 2 substance," which contradicts long-standing TSCA policy for regulating Class 2 substances as distinct chemical substances. This second point is discussed further below (section B).

The amended proposal would subject manufacturers of impurities to the test rule even though persons who manufacture a substance solely as an impurity have not been subject to most prior section 4 testing requirements. EPA historically has distinguished impurities from other chemical substances that are manufactured for distribution in commerce as chemical substances per se. An important distinction exists between impurities--which are part of another substance, mixture, or article--and other chemical substances that are intentionally manufactured with a separate commercial purpose. EPA has always distinguished substances manufactured as impurities based on nature and intent, not on amounts. For example, EPA has stated that the definition of impurity is not based on the amount of the substance. (*Supplementary Premanufacture Questions and Answers*, EPA, September 1983, p.6)

B. The amended proposal contradicts well-established TSCA policy regarding Class 2 substances

Class 2 substances are those whose composition cannot be represented by a definite, complete structural diagram; they often are derived from natural sources or complex chemical reactions. As explained in our previous comments, petroleum companies manufacture many streams and products that are listed on the TSCA Inventory as distinct chemical substances,

i.e., Class 2 substances. Manufacturers of Class 2 substances exist in many other industries; for example, EPA mentions brominated soybean oil as an example of a Class 2 substance (62 FR 67470). Other examples include various solvents and surfactants. We focus our discussion on petroleum streams and products because these are the substances most relevant to API and the area in which we have expertise; however, this issue is not limited to our industry.

Consistent with past Agency interpretations and practice, "manufacturers" of HAPs as components of Class 2 substances should be subject to the test rule only if they separate HAPs constituents from the Class 2 substances of which they are a part. As explained in our previous comments, the petroleum industry has been consistent in its view that refiners manufacture the Class 2 chemical substances listed on the TSCA Inventory, and our members base TSCA compliance activities on this nomenclature, which has its roots in the earliest years of TSCA implementation. Furthermore, EPA has applied this framework in structuring the Inventory, implementing TSCA section 8, and applying TSCA section 4 test rules. As discussed in our April 4, 1997 comments (pages 5-8), EPA has required refiners to test petroleum streams when the streams themselves are subject to test rules as Class 2 substances. However, the Agency has not required testing when the test substance is produced only as a constituent of a stream (and not isolated).

There are sound reasons for treating Class 2 substances as distinct chemical substances and not defining the individual constituents of the streams as separately manufactured chemical substances, unless they are isolated. Class 2 substances are complex and variable in composition, and the Class 2 nomenclature is accurate and useful for representing them. The regulatory framework reflects both chemistry and business reality in terms of commercial intent, i.e., manufacturers of Class 1 substances produce and market such substances *per se*, while manufacturers of Class 2 substances produce and market the complex streams and not their individual components.

Furthermore, applying TSCA rules to Class 2 substances, and not their individual components, does not compromise protection of human health and the environment. To the contrary, evaluation and regulation of the substances are facilitated by the distinction between Class 1 and Class 2 substances, because the distinction reflects real-world differences in the nature of the substances and the form in which they are produced and distributed in commerce. The status of Class 2 substances as distinct chemical substances is reasonable and practical, and has worked well for both EPA and industry over the two decades of implementation of TSCA. EPA has provided no adequate justification for why it would change its policy now.

C. EPA has not justified its proposed change

EPA has not justified why it is proposing to expand the scope of the HAPs test rule beyond the primary commercial manufacturers of HAPs chemicals, reaching to producers of impurities and components of Class 2 substances. Since EPA is proposing to deviate from well-established policy, it is incumbent upon EPA to justify the proposed change, and address the ramifications of the change.

EPA does not offer any legal, technical, or public policy justification for the proposed changing of long-standing policy. As explanation for its proposed volume and percentage

cutoff for determining who must initially comply with the test rule, EPA states, "It is reasonable to expect that persons who manufacture or process chemicals containing HAPs should know the composition of the chemicals they manufacture or process at or above one percent by weight, and should know if they manufacture or process 25,000 lb or more of a chemical per year at any facility." (62 FR 67470) This appears to be a default reliance on the thresholds of another program (the Toxic Release Inventory (TRI) program under the Emergency Planning and Community Right-to-Know Act (EPCRA)), and an abdication of responsibility for crafting responsible policy within the framework of TSCA, its legislative history, and TSCA precedent. EPA also states that "The criteria proposed in this amended proposed rule provide an equitable means for determining which entities would be initially and secondarily responsible for testing HAPs chemicals. . ." (62 FR 67470) EPA's goal should not be to impose testing requirements on as many parties as possible. Instead, EPA should construct testing requirements that will achieve the testing effectively and efficiently, and should rely on the primary commercial manufacturers of the substances to do the testing.

Nothing in the Agency's explanation addresses why EPA is expanding its proposal to include manufacturers of impurities and components of Class 2 substances, instead of first relying on the primary commercial manufacturers of the substances to do the testing. EPA should not abandon the important distinctions between the primary commercial manufacturers of Class 1 chemical substances and others who produce impurities and/or components of Class 2 substances. API urges EPA to focus testing requirements on manufacturers who intentionally produce and sell subject chemical substances *per se*, particularly when such manufacturers are readily identifiable. From a public policy standpoint, and in the spirit of the statute, these manufacturers are primarily responsible for testing the substances under TSCA test rules. Other TSCA rules and long-standing policy make distinctions based upon intent and on direct versus indirect commercial benefit. For example, the PMN regulations contain exemptions for chemicals which "Although they are manufactured for commercial purposes under the Act, they are not manufactured for distribution in commerce as chemical substances *per se* and have no commercial purpose separate from the substance, mixture, or article of which they are a part. . ." (40 CFR 720.30(h))

In its original proposed HAPs test rule, EPA stated that manufacturers of byproducts would be subject to the testing requirements, noting that carbonyl sulfide is produced almost exclusively as a byproduct (61 FR 33190). As explained in our April 4, 1997 comments (pages 8-12), carbonyl sulfide has no commercial market and therefore is not within the purview of TSCA. Under its proposal to impose testing requirements on producers of byproducts, EPA would identify "manufacturers" to test carbonyl sulfide; however, if producers of byproducts were *not* subject, there likely would be no one to conduct testing because there are no commercial manufacturers of carbonyl sulfide. API disagrees with EPA's approach for imposing testing requirements on byproducts such as carbonyl sulfide, and even more strongly opposes and questions the expanded scope of the amended proposal, which goes even further by imposing testing requirements on producers of *all* subject HAPs as byproducts, impurities, and components of Class 2 substances. There is no logic evident in the expansion, particularly considering that, with the exception of carbonyl sulfide, manufacturers of test substances as commercial chemical products (i.e., not impurities nor

process.

- This recommended approach is equally protective of health and the environment as EPA's proposed approach. In fact, it would have more benefits by resulting in a simpler and faster process for accomplishing the testing.

In summary, a tiered scheme would be a practical and effective way to implement the test rule in a manner consistent with TSCA and its legislative history.

V. Other Issues

A. EPA should not require export notifications for Class 2 substances that contain HAPs

EPA should not require export notification for exports of petroleum streams or Class 2 substances that contain HAPs. In its September 2, 1994 clarification of the test rule for 1,3,5-trimethylbenzene (TMB), when EPA clarified that only manufacturers, importers, and processors of TMB as an isolated product are subject to the test rule, the Agency also clarified that export notifications are not required for complex mixtures or substances containing TMB. EPA stated that "... only exporters of TMB as an isolated product or as part of mixtures known to contain previously isolated TMB are subject to the TSCA section 12(b) export notification requirements." If EPA decides to maintain existing policy or to adopt the tiered approach described above, the Agency should clarify that export notifications are not required for Class 2 substances that contain the HAPs.

However, even if EPA decides to apply the new policy, the Agency should not apply export notification requirements to exporters of Class 2 substances. Class 2 substances include common, well-characterized materials such as crude oil, and export notifications triggered by the presence of the components of Class 2 substances would not provide any relevant information to EPA or to receiving countries. Rather, export notifications for Class 2 substances would be burdensome for the regulated community and for EPA, and there would be no benefit associated with the effort.

EPA has in the past narrowed export notification requirements to apply to only certain exports of regulated substances. For example, in an August 19, 1994 final rule (59 FR 42769), EPA limited the scope of export notifications required for hexavalent chromium. The rule applied export notification requirements to hexavalent chromium chemicals used for water treatment, and stated that export notification is not required for exports of other hexavalent chromium products such as paints, dyes, pigments, coatings, and electroplating and conversion coating products. In the preamble to the final rule, EPA stated that the rule is "consistent with other Agency efforts to improve the utility of these notices for receiving governments, and to optimize the ability of EPA to process more efficiently export notices it receives annually and respond to requests from foreign governments for additional information on chemicals and export notices." (59 FR 42771) Similarly, applying export requirements triggered by this test rule only to exports of the Class 1 substances will serve the interests of receiving governments and will facilitate processing of export notices.

Finally, API urges EPA to consider the TSCA statute when formulating its export notification policy. TSCA section 12(b) requires export notification "[i]f any person exports or intends to export to a foreign country a chemical substance or mixture for which the submission of data is required. . ." The statutory language does not require export notification

for mixtures or Class 2 chemical substances *containing* chemical substances for which submission of data is required. A plain reading of the statute is that export notification is required for a substance or mixture when the substance or mixture itself is regulated, not for all mixtures or Class 2 substances containing even trace amounts of a regulated chemical. At a minimum, the statute leaves room for EPA to craft reasonable policy in this rule and to *not* apply export notification to all mixtures and Class 2 substances containing the test substances.

B. EPA should clarify that there is no requirement for analysis

EPA should clarify that the test rule does not impose any requirement to analyze mixtures or Class 2 substances for the presence of proposed section 4 test rule constituents. Many components of Class 2 substances have no separate commercial value and therefore their identities, amounts, or both may be unknown. EPA should include language similar to that in the preamble to its export notification requirements, where the Agency stated that exporters need not test their products in order to comply with the regulations, and that the requirement covers only substances known to be in the material. (45 FR 82845, December 16, 1980.) EPA should state in this test rule both (1) that manufacturers are not required to test mixtures and Class 2 substances, and (2) that any testing requirements that apply to components of mixtures or to Class 2 substances cover only components known to the manufacturers to be in the mixtures or Class 2 substances.

C. Waste streams captured and substantially destroyed should not be considered in determining applicability

In determining whether chemical production at a facility exceeds the 25,000 lb threshold for applicability of the rule, facilities should not be required to count chemicals in waste streams that are captured and substantially destroyed. There is minimal release and exposure potential for these waste streams. Moreover, capture and destruction of waste streams clearly should be distinguished from manufacturing of chemicals as commercial products. We request that EPA state that chemicals in waste streams captured and substantially destroyed need not be counted in determining applicability of the test rule.

VI. Conclusion

The expanded scope in EPA's amended proposed test rule for HAPs is neither justified nor necessary for the purposes of the test rule, and it would constitute a significant departure from existing TSCA policy and implementation. It would impose significant additional burdens and paperwork without additional benefits. It has the potential to disrupt implementation of this test rule and possibly other TSCA rules, because it would change the regulatory framework that has been used until now. Long-standing policy and practice is that petroleum streams and other Class 2 substances are listed on the TSCA Inventory and treated as distinct chemical substances, and that TSCA rules have been applied to the Class 2 chemical substances and not to the individual constituents of the Class 2 substances. API urges the Agency not to abandon an approach to implementing TSCA that has worked well for two decades.

An alternative approach to the one outlined in the amended proposed rule would be a tiered scheme that imposes initial testing requirements on persons who intentionally manufacture the subject chemicals for direct commercial purposes, i.e., those who isolate the substances and sell them on the market. We recommend simple regulatory language that

states that manufacturers of components of Class 2 substances would not be required to test unless directed to do so in a subsequent *Federal Register* notice. Such an approach would be practical and consistent with the TSCA statute and precedent for implementing it.

API will provide additional information, answer questions, or discuss these comments upon request. We appreciate the opportunity to participate in the rulemaking process, and hope that our comments assist the Agency in constructing an effective test rule.

June 22, 1998

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics (OPPT)
Document Control Office (7407)
Room G-099
401 M Street, S.W.
Washington, D.C. 20460

Re: Amended Proposed Test Rule for Hazardous Air Pollutants
[OPPTS-42187A; FRL-4869-1; 63 FR 19694, April 21, 1998]

To Whom It May Concern,

The American Petroleum Institute (API) submits these comments on the Environmental Protection Agency's (EPA or "the Agency") amended (*62 Federal Register 67466*, December 24, 1997; *63 Federal Register 19694*, April 21, 1998) proposed test rule under section 4(a) of the Toxics Substances Control Act (TSCA), to require manufacturers and processors of 21 hazardous air pollutants (HAPs) to test for certain health effects. These comments address the new issues presented by the amended proposal, and supplement our April 4, 1997 comments, which we incorporate by reference.

API is a national trade association representing more than 300 member companies involved in all aspects of the oil and gas industry, including the major sectors of exploration, production, refining, transportation and distribution, and marketing of petroleum and petroleum products. EPA's amended proposed test rule would have far-reaching implications for both our members and for others in the regulated community.

API's primary concern is that the amended proposal would significantly expand the scope of the proposed rule by subjecting to the testing requirements persons who are "manufacturers" of HAPs as impurities or as components of Class 2 substances. EPA's proposal to require "manufacturers of components of Class 2 substances" to test contradicts long-standing TSCA policy and implementation. Consistent with past TSCA interpretations and practice, manufacturers of components of Class 2 substances should be required to test only if they produce and isolate the components from the Class 2 substances of which they are a part.

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As an alternative, API offers a tiered scheme in which manufacturers (including importers) of a listed substance as a component of a Class 2 substance are not required to test, unless no manufacturers of a listed substance as a Class 1 substance have been identified. Such a tiered scheme would focus testing requirements on the primary manufacturers of the HAPs as distinct chemical substances produced for direct commercial benefit and would be equally protective of health and the environment as EPA's current proposal.

API also conducted an extensive critique of the Agency's *Economic Assessment (EA) for the Amended proposed TSCA Section 4(a) Test Rule for 21 Hazardous Air Pollutants* (dated November 14, 1997). API found several areas where the EA is deficient, and, where possible given data availability, we provide a replacement for the analysis contained in the EA.

These issues and others are addressed in detail in our attached comments. API welcomes the opportunity to meet with the Agency to discuss these comments and provide any clarification regarding our concerns and recommendations.

If you have any questions regarding this letter or our attached comments please contact Walter L. McLeod of my staff at (202) 682-8493.

Sincerely,

J. Eldon Rucker
Deputy Director,
Health and Environmental Affairs

cc: Dr. Lynn Goldman, Assistant Administrator, OPPTS
Dr. William Sanders, Office Director, OPPT
Dr. Charles Auer, Division Director, CCD/OPPT
Dr. Richard W. Leukroth, Jr., Project Manager, CCD/OPPT